As the neglect of the body-resistance to the induction current represents only an insignificant source of error, it follows that the simple measurement of the distance between the coils, without considering the resistance to conduction, perfectly suffices, for all practical purposes, for forming an estimate of the faradic irritability.

THE EXPERIMENTAL STUDY OF REFLEX PUPILLARY IMMOBILITY.

F. Mendel ("Deutsch. med.Wochenschrift," 1889, No.47,) reports that in a number of dogs, cats and rabbits, shortly after birth, as soon as the eyes were open, the iris was in greater part removed by means of a single or repeated iridectomy. The majority of the eyes operated upon were destroyed through suppuration of the globe.

After several months the animals were killed, and the brains examined by a series of sections.

Atrophy of the anterior corpora quadrigemina and the corp. geniculat. ext., on the opposite side, and atrophy of the ganglion habenulæ on the side of the operation, was found in those cases with suppuration of the globe and optic atrophy.

As a rule, in those cases where the eyeball was preserved, atrophy of the ganglion habenulæ appeared upon the side of the operation.

The assumption, therefore, seems warranted, that in the ganglion habenulæ we have a centre for pupillary movement, whose development is arrested when it has no function to perform, as is seen in the case of iridectomized animals where no iris movement takes place. Darkschewitch has shown by means of anatomical and physiological studies, that the pupillary fibres of the optic tract enter into the pineal gland and into the ganglion habenulæ.

In consequence of this, the ganglion habenulæ would have to be looked upon as the reflex centre for pupillary movement.

Gudden's statement as to a prominence situated in front of the superior corpora quadrigemina; also the physiological researches of Bechterew, Hensen, Völkers and Christiani, all of whom emphasize the importance of the third ventricle, especially its posterior wall, in its relation to pupillary movement, can easily be reconciled with the results of Mendel's investigations.

What, then, is the course of the reflex arc?

Between the ganglia habenulæ there is a commissure radiating into the lowest part of the posterior commissure. The portion of this commissure adjacent to the atrophied ganglion habenulæ also becomes atrophic.

It can be traced for some distance into the posterior commissure, and according to M., indicates the direction of the sphincter nucleus.

But no atrophy was found among the collections of cells belonging to the oculo-motorius nucleus.

On the other hand, atrophy of Gudden's nucleus could be demonstrated in two cases. The reflex path for the rays of light which reach the eye, and the subsequent contraction of the pupil would have the following course: Optic nerve (optic tract) to the ganglion habenulæ without decussation, thence to the posterior commissure to Gudden's nucleus, and from the latter to the fibres of the oculo-motorius crest.

These researches indicate the method to be adopted in future in all anatomico-pathological investigations of this nature.

TRAUMATIC TABES.

In the "Zeitschrift f. klin. Medicin," Bd. xvii., hft. 1 u 2, Klemperer has tabulated the literature upon this subject. In all there were thirty cases, to which the author adds four new cases under Leyden's observation.

In a monograph entitled "The Gray Degeneration of the Posterior Columns of the Spinal Cord," published in 1863, Leyden was the first to describe in detail a case of traumatic tabes.

K.'s *first* patient was a locksmith, who was injured in the right leg from the fall of a heavy weight. The wound healed perfectly, yet, after a short time, the patient noticed that the right leg was weaker than the left, and that the scar became painful when he worked. Despite all treatment, the pain grew worse without previous exertion, and radiated over the entire leg. Towards the end of the same year, about eight months after the injury, the left leg became weak, and the pains, which were of a shooting character, affected both legs.

Not quite a year and a half after the injury, he was obliged to visit the clinic, and the diagnosis was made of well advanced tabes.

The *second* patient was injured during the late war by his wounded horse falling upon him. The right foot was crushed in the region of the ankle-joint, without fracture, but with extensive laceration of the soft parts.